



SDMS DocID

481043

BENNINGTON LANDFILL

Houghton Lane  
Bennington Vermont

EPA ID# VTD 981064223

Potential Hazardous Waste Site  
Preliminary Assessment

January 1986

Waste Management Division

Department of Water Resources

Vermont Agency of Environmental Conservation

Superfund Records Center

SITE: Bennington

BREAK: 1.2

OTHER: 481043

## Bennington Landfill

The Bennington Landfill occupies 10 acres of a 28 acre parcel of land immediately north of Houghton Lane, in Bennington Vermont. The remaining land is used for tire and metal storage, and a supply area for cover material. It has served as a sanitary landfill for a population of 15000 since June of 1969.

During a perimeter survey on January 15, 1986, the operator confirmed the location of an industrial waste lagoon now 30 feet below the most recent lift at the south west corner of the landfill. Three 10 foot lifts of landfill material now cover this lagoon. An unsuccessful attempt to dewater the lagoon by adding cement was made in 1975 and the lagoon was filled with landfill material and buried. Along the western edge of the landfill a 3 - 5 foot ditch runs below original grade to prevent surface water from leaching into the landfill area.

Several local industries disposed of liquid wastes in this lagoon from 1969 until it was closed by the operator in July 1975.

JARD, Incorporated a manufacturer of capacitors disposed of 60000 scrap capacitors per year for the five years between 1971 and 1975 for an annual average of 38500 pounds of PCB's as landfill material.

Benmont Corporation, a wrapping paper manufacturer, disposed of inks, glue and solvents in the lagoon from 1969 until 1975. The solvents included acetone and ethyl acetate, and the inks contained chrome yellow pigment.

The BIJUR company disposed of perchloroethylene used for degreasing by dumping it into the lagoon.

Globe Union, a division of Johnson Controls disposed of paint thinners, waste oils and solvents as well as scrap automotive batteries. The liquids were poured into the lagoon, and the solid waste landfilled.

The leachate from the landfill has been sampled and analysis has found benzene, toluene, xylenes, dichloroethane and dichloroethene. In the summer of 1979 a large pile of tires next to the site of the now buried lagoon caught fire, and attempts by the fire department to extinguish them by flooding with water failed. The burning tires were then buried with landfill cover material. Repeated complaints of fires at the landfill have been received by the Air Pollution Control division of the Vermont A.E.C. On one occasion leachate flowing from a drain at the toe of the landfill was observed to catch fire by a state Air Pollution Compliance person.

The Landfill is situated on a glacial Kame Terrace, composed of sand and gravel, atop a layer of till. Bedrock consists of a limestone, the Dunham dolomite, outcropping 1/2 mile to the west and shows considerable fracturing.

Groundwater is present in two gravel deposits and is perched by the relatively impermeable till, as well as being found in the bedrock. The groundwater flow is predominantly east, with a slightly northern component as evident from abundant seeps east of the landfill. Surface water follows the slope of the general terrain easterly toward Hewitt Brook, which flows south to the Waloomsac River. Both Hewitt Brook and the Waloomsac are popular trout fishing streams.

The area around the landfill is semi-rural with single residential homes being the rule. Several of the homes have wells for drinking water, as well as being connected to the Bennington municipal water system.

The PCB's that were disposed of, because of their bio-accumulative properties could enter the food chain if they migrated from the landfill soils.

The leachate from the landfill is running from a drain pipe at the toe of the landfill and collecting on the surface along the eastern boundary of the site.

Based on the information collected for this preliminary assessment, it is recommended that a site inspection be conducted at the Bennington Landfill for the following reasons:

- \* Documented disposal of PCB's in the Landfill
- \* Unknown quantities of hazardous materials disposed of in the Landfill
- \* Potential groundwater contamination by hazardous waste
- \* Observed surface water contamination

- \* Drinking water wells in the vicinity of the Landfill
- \* Potential for contamination to enter the food chain because of bio-accumulative property of PCB's
- \* Potential for air pollution as the result of uncontrolled fires at the site

This site inspection should include sampling of soil, water and air. Both surface water and ground water in the vicinity of the landfill should be sampled.

This site inspection should be given a high priority because of the proximity of drinking water wells.

The quantity of industrial wastes, as well as the disposal methods offer a high potential for environmental damage to soil, water and air.

The proposed closure of the landfill in July of 1986 should be done with the possibility of every necessary remedial action considered as part of the closure plan.

### Bennington Landfill References

1. Vermont Agency of Environmental Conservation. Solid Waste Files (Bennington Landfill).
2. Vermont Agency of Environmental Conservation - Industry Files (Bijur - Jard - Benmont - Globe Union - Johnson Controls)
3. Site Visit and Perimeter Survey January 5, 1986 Bill Barry, VT A.E.C.
4. Vermont Agency of Environmental Conservation - Air Quality Division Files (Bennington Landfill)



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
VTD 981064223

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Bennington Landfill		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER Houghton Lane			
03 CITY Bennington	04 STATE VT	05 ZIP CODE 05201	06 COUNTY Bennington	07 COUNTY CODE 063	08 CONG DIST 01
09 COORDINATES LATITUDE 42° 44' 40"		LONGITUDE 73° 12' 05"			

10 DIRECTIONS TO SITE (Starting from nearest public road)

North on Park Street Extension - left turn onto Houghton lane - right turn into landfill

III. RESPONSIBLE PARTIES

01 OWNER (If known) Town of Bennington, Vermont		02 STREET (Business, mailing, residential) 205 South Street			
03 CITY Bennington	04 STATE VT	05 ZIP CODE 05201	06 TELEPHONE NUMBER (802) 447-1171		
07 OPERATOR (If known and different from owner)		08 STREET (Business, mailing, residential)			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER ( )		
13 TYPE OF OWNERSHIP (Check one) <input type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input checked="" type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN					

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: \_\_\_\_/\_\_\_\_/\_\_\_\_ MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: \_\_\_\_/\_\_\_\_/\_\_\_\_ MONTH DAY YEAR ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE 1/15/86 MONTH DAY YEAR <input type="checkbox"/> NO		BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION BEGINNING YEAR 1969 ENDING YEAR present <input type="checkbox"/> UNKNOWN			

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

PCB oil waste; scrap capacitors containing PCB's; alkaline cleaners; scrap automobile batteries, degreasing solvents; ink; paint thinners

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

There are at least five drinking water wells within a mile of the landfill which could be contaminated from leachate from the landfill. Contamination observed in surface water may migrate to nearby Hewitt Brook.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)  
☒ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Tom Moyer	02 OF (Agency/Organization) Vermont Agency of Environmental Conservation		03 TELEPHONE NUMBER (802) 244-8702	
04 PERSON RESPONSIBLE FOR ASSESSMENT Bill Barry	05 AGENCY VT. A.E.C.	06 ORGANIZATION Waste Mgmt. Div.	07 TELEPHONE NUMBER (802) 244-8702	08 DATE 01/15/86 MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
VTD 981064223

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☒ A. SOLID ☐ E. SLURRY  
☐ B. POWDER, FINES ☐ F. LIQUID  
☐ C. SLUDGE ☐ G. GAS  
☐ D. OTHER \_\_\_\_\_  
(Specify)

02 WASTE QUANTITY AT SITE

(Measures of waste quantities must be independent)

TONS unk.

CUBIC YARDS \_\_\_\_\_

NO. OF DRUMS \_\_\_\_\_

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC ☒ E. SOLUBLE ☒ I. HIGHLY VOLATILE  
☐ B. CORROSIVE ☐ F. INFECTIOUS ☐ J. EXPLOSIVE  
☐ C. RADIOACTIVE ☐ G. FLAMMABLE ☐ K. REACTIVE  
☐ D. PERSISTENT ☐ H. IGNITABLE ☐ L. INCOMPATIBLE  
☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	unk.		from inks and paints
OLW	OILY WASTE	unk.		from machine tool industry
SOL	SOLVENTS	unk.		from printing and machine shops
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	unk.		from capacitor plant
IOC	INORGANIC CHEMICALS	unk.		from paint and inks
ACD	ACIDS	unk.		from auto battery plant
BAS	BASES	unk.		from printing industry
MES	HEAVY METALS	unk.		from inks and scrap batteries

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
occ	P.C.B.'s	1336-36-3	SI and L.f.	unk.	
sol.	perchloroethylene	127-18-4	SI and L.F.	unk.	
sol	acetone	67-64-1	SI and L.F.	unk.	
bas	sodium hydroxide	1310-73-2	SI and L.F.	unk.	
slu	lead sulfate	1216590-6	SI and L.F.	unk.	
sol	toluene	108883	SI and L.F.	unk.	
sol	1,2-dichloroethane	1300216	SI and L.F.	unk.	
mes	lead chromate	7758976	SI and L.F.	unk.	
sol	benzene	71-43-2	SI and L.F.	unk.	
sol	dichloroethene	107-06-2	SI and L.F.	unk.	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1. Vt. Agency of Environmental Conservation files - (Jard - Benmont Corp - Bijur - Johnson Controls)
2. Vt. Agency of Environmental Conservation solid waste files - (Bennington landfill)



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
VTD 981064223

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☒ POTENTIAL ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Ground water contamination is possible since it is present in at least two gravel deposits within the landfill very near the surface. Wastes were disposed of in an unlined lagoon.

01 ☒ B. SURFACE WATER CONTAMINATION

02 ☒ OBSERVED (DATE: 8-20-84) ☐ POTENTIAL ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Surfaced waters leaching through the landfill were sampled and volatile organic compounds detected. This leachate flows to a marsh just east of the landfill and to Hewitt Brook  $\frac{1}{2}$  mi from the site.

01 ☒ C. CONTAMINATION OF AIR

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☒ POTENTIAL ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Numerous uncontrolled fires at the landfill have caused complaints to the state Air Pollution Control Division and the town has been convicted of violating state Air Quality Regulations.

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS

02 ☒ OBSERVED (DATE: 6-85) ☐ POTENTIAL ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Liquid waste disposed of in the landfill is flammable. A state Air Pollution staff person witnessed leachate catch fire during a site investigation in June, 1985.

01 ☒ E. DIRECT CONTACT

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☒ POTENTIAL ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

There is no security at the site. It is accessible to both humans and animals.

01 ☒ F. CONTAMINATION OF SOIL

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☒ POTENTIAL ☐ ALLEGED

03 AREA POTENTIALLY AFFECTED: \_\_\_\_\_ (Acres)

04 NARRATIVE DESCRIPTION

Wastes were poured directly into an unlined lagoon and dumped with other landfill material onto the ground. Leaching has transported them to the soil.

01 ☒ G. DRINKING WATER CONTAMINATION

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☒ POTENTIAL ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

The nearest drinking water well is some 500 feet from the landfill. There are five other drinking water wells within a mile of the landfill.

01 ☐ H. WORKER EXPOSURE/INJURY

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED

03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01 ☐ I. POPULATION EXPOSURE/INJURY

02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
VTD 981064223

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

Infra red aerial photo on July, 1977, shows area of stressed vegetation to the east of the landfill.

01 ☒ K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION (Include name(s) of species)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

The landfill is accessible to animals.

01 ☒ L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

PCB's disposed of both in the lagoon and as solid landfill waste are known to be bioaccumulative and could enter the food chain if they migrate from the landfill soils to nearby Hewitt Brook.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES  
(Spills/runoff/standing liquids/leaking drums)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Leachate is discharging from a drain pipe and from springs at the toe of the landfill and collected in marshy areas at the eastern site boundary. Wastes were poured into a lagoon and in drums buried in the landfill.

01 ☒ N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

Hewitt Brook serves as a stream draining the area of the landfill and could be receiving contaminants from both surface and ground water. At least six residences have wells that could become contaminated.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

A large quantity of tires were buried in the landfill next to the industrial waste lagoon. They burned in 1979 and when the Fire Department could not extinguish the fire they were buried in the landfill.

III. TOTAL POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

IV. COMMENTS

This landfill is scheduled to be closed by the town in July, 1986. Closure plans should include the need for any activities recommended by site inspection.

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports)

1. Vt. A.E.C. hazardous waste (RCRA) industry files (Jard - Benmont Corp. - Johnson Controls - BIJUR)
2. Vt. A.E.C. files, Solid Waste Division (Bennington Landfill)
3. Vt. A.E.C. files, Air Pollution Control Division - (Bennington Landfill)

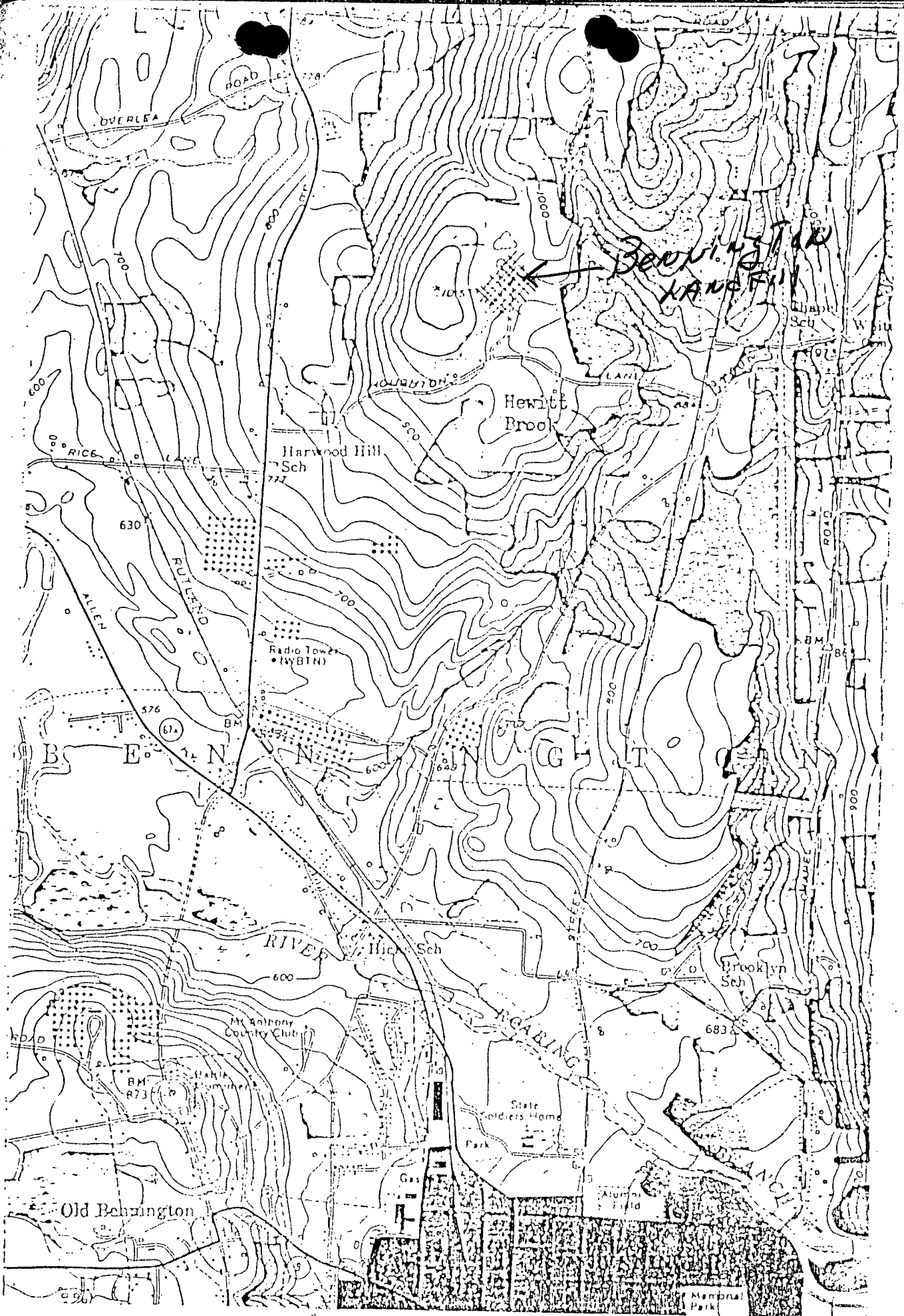


Figure 2: Landfill(cross-hatched area) and Hewitt Brook.